

Remarks:

Claims 1-10 remain in this application. Claims 11-14 have been canceled.

Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Morgan et al. (U.S. Patent No. 6,923,824).

Applicants respectfully traverse this rejection.

Claims 1 and 2 have been amended to further distinguish the claimed invention from Morgan.

Initially it is noted that Morgan neither discloses or suggests using the Morgan suture anchor as a graft retainer. Nevertheless, Applicants will address the Examiner's attempt to identify elements of Morgan that are equivalent to the claimed invention.

First of all, whatever the Morgan device is, it is not a graft block sized to slidingly fit within the bone tunnel, and it does not have a distally facing support surface at the distal end. Furthermore, Morgan does not have any connector hole as that term was used by Applicants (note that the term now used is "transverse throughbore"). Applicants' connector hole (throughbore) is formed (and claimed to be) through the support surface. The "support surface" identified by the Examiner is within the body of Morgan's suture anchor and has a channel or bore 24 adjacent to this support surface. The elements identified by the Examiner as "countersunk connector holes" are the ends of the bore 24. These holes do not go through anything that could be characterized as a support surface.

It is also noted that while the Examiner has stated that the "loop" shown in Morgan has a first end and a second end, with at least one of the ends threaded through at least one connector hole and secured in the connector hole, Morgan has no such structure. The Examiner's attempt to force Applicants' claimed elements to fit the Morgan device is not credible. Significantly, Morgan does not disclose or suggest that any loop in any of the Morgan embodiments has an end. All of the Morgan loops are

endless loops and even the embodiment of Morgan's Figures 17-22 is endless when its fabrication is complete. Furthermore, no end is secured within any connector hole. While Morgan's intermediate connector (i.e. loop) is secured in bore 24, this is because the intermediate connector is a loop where the loop is held by the "convex support surface", not by a single connector hole. Finally, Applicants have clarified the structure of the means for attaching the graft block to the bone tunnel by specifying that a separate transverse member goes through the loop created by the intermediate connector.

Regarding claim 2, Applicants believe that the foregoing explanation should suffice to distinguish claim 2 from Morgan. It is noted that the projecting walls identified by the Examiner are not even remotely similar to Applicants' claimed projecting walls. The Morgan "projecting walls" do not at all retain the intermediate connector on the convex surface – "they" are nowhere near the intermediate connector.

It must also be noted that the Examiner's comment that a knot could be formed and pulled back into "countersunk ends of the holes" is inaccurate. The comparisons of the Morgan suture anchor to the claimed invention have heretofore been made with the assumption that the Morgan device is inverted so its loop, as Applicants' loop, would be depending from the suture anchor and graft block, respectively. When this is done, any knots lying adjacent the "countersunk connecting holes" could not serve to hold any interconnecting member because there is no throughbore structure shown from which anything could depend. The Examiner's interpretation of Morgan impermissibly stretches the bounds of reasonable embodiments and variations of Morgan's invention.

Claim 1 is further allowable over Morgan because Morgan fails to disclose the graft block comprising "at least one transverse throughbore being formed through the support surface" of the graft block the throughbore communicates from a first side of the convex, distally facing support surface to a second side of the convex support surface. In Examiner's interpretation, the U-shaped hole through

Morgan's device defines a convex support surface. However, this U-shaped hole cannot both define the support surface and extend through the support surface. Therefore, claim 1 further does not read on Morgan and is allowable over Morgan.

Claim 1 is further allowable over Morgan because Morgan fails to disclose "the intermediate connector formed of an elongated member...having a first end and a second end, at least one of the first and second ends being threaded in one direction through the at least one transverse throughbore". Morgan discloses a continuous loop with no free ends. Therefore, claim 1 further does not read on Morgan and is allowable over Morgan.

Claim 1 is further allowable over Morgan because Morgan fails to disclose "means...for receiving a separate transverse member to attach the graft block at a predetermined point" within the bone tunnel. Morgan discloses screw threads not a separate transverse member and thus has no means for receiving a separate transverse member. Therefore, claim 1 further does not read on Morgan and is allowable over Morgan.

Claim 2 depends from claim 1 and is allowable for the same reasons as claim 1. Claim 2 is further allowable over Morgan because Morgan fails to disclose any transverse throughbore and further has no counterbored or countersunk transverse throughbore. Therefore, claim 2 does not read on Morgan and is allowable over Morgan.

Claims 3-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Re et al. (U.S. Patent No. 6,712,849). Applicants respectfully traverse this rejection. With regard to amended claim 3, Re fails to disclose "the distally-facing, saddle-shaped graft support surface at the distal end". Regardless of how Examiner interprets the openings in Re, none of them define a distally open saddle shaped trough. Therefore claim 3 does not read on Re and is allowable over Re.

Furthermore, Applicants disagree with the Examiner's characterizations of Applicants' claim elements in the marked-up figures purporting to find equivalence between the Applicants' claim elements and those of the Re et al. Device. Contrary to the Examiner's belief the Re et al. device does not have a graft support surface adjacent the distal end. The Re et al. graft supporting surface is the surface at the bottom of aperture 110, not the portion of body 100 between suture hole 145 and aperture 115 as identified by the Examiner. The tunnel attachment means of Re et al. is, therefore, distal to the graft supporting surface – not proximal as the Examiner contends. While the Examiner states that the graft support surface is adjacent the distal end (between suture hole 145 and aperture 115) and, therefore, the “tensile forces on the graft result in compressive forces on the graft block between the graft support surface and the tunnel attachment means”, this is incorrect. Even if the Examiner's identification of the Re et al. elements was correct, the structure of the Re et al. device is such that tensile forces on the graft (in aperture 110) causes it to pull away from the tunnel attachment means (in aperture 115), consequently putting the portions of the Re et al. graft ligament support block above (in the Examiner's drawing) aperture 110 in tension, not compression. The area in tension – pulling away from the tunnel attachment means in aperture 115 – is between apertures 110 and 115. Applicants' tunnel attachment means is opposite that of Re et al. That is, the graft supporting surface is above the tunnel attachment means, pushing the area below the graft support surface toward the tunnel attachment means.

Furthermore, Applicants' support surface, if properly identified, is not bounded by distally projecting side walls. (As used herein, the term “support” means a surface upon which the graft rests.)

Claims 4-10 depend from claim 3 and are allowable for the same reasons as claim 3.

Applicants believe that the claims remaining in this case are in condition for allowance and respectfully requests that a timely Notice of Allowance be issued in this case. Examiner is encouraged to contact Applicant by telephone with any questions about the content of this amendment or to discuss allowable subject matter to facilitate placing this case in condition for allowance.

Respectfully submitted,

By: Gene Warzecha
Gene Warzecha
Registration No. 28,919
Linvatec Corporation
11311 Concept Boulevard
Largo, FL 33773
727-399-5295